

Mineral Industry Surveys

For information, contact:

Daniel Edelstein, Copper Commodity Specialist
U.S. Geological Survey
989 National Center
Reston, VA 20192
Telephone: (703) 648-4978, Fax: (703) 648-7757
E-mail: dedelste@usgs.gov

Michael Leahy (Data)
Telephone: (703) 648-7964
Fax: (703) 648-7975
E-mail: mleahy@usgs.gov

Internet: <http://minerals.usgs.gov/minerals>

COPPER IN JUNE 2005

Average daily U.S. copper mine production declined slightly in June, yet was about 7% above production in June 2004, according to data compiled by the U.S. Geological Survey. Average daily production of electrolytically refined and total refined copper fell by 9% and 4%, respectively, owing to a smelter maintenance shutdown in May that led to a shortage of refinery feed material. Average daily consumption of refined copper rose by more than 9% in June and was at the highest level since September 2004.

Mine production for the first half of 2005 was almost 12% higher than that for the first half of 2004, but about 3% lower than production in the second half of 2004 following the restart of idle capacity in Arizona and New Mexico and startup of the refurbished Robinson Mine (Nevada). Mine production was anticipated to decline in the second half of 2005 owing to a revamped mine plan at the Bingham Canyon Mine in Utah (see Copper in May 2005), labor unrest at ASARCO Incorporated's (Tuscon, AZ) mines in Arizona, and unstable ground conditions at the Robinson Mine in Nevada.

On July 2, workers at Asarco's Ray Mine (Arizona) began a strike that soon spread to all of Asarco's Arizona facilities including the Hayden smelter and the Mission and Silver Bell Mines. Workers at the Amarillo, TX, refinery joined the job action on July 6. The strike followed an intensive 6-day bargaining session at the end of June and expiration of the contract between Asarco and the United Steelworkers Union at Ray. Prior to the strike, about 750 workers at Asarco's other facilities had continued to work under the terms of a previous contract that had expired in July 2004. The latest round of negotiations failed to break a deadlock over a proposed wage freeze and healthcare and pension benefit cuts sought by Asarco. While initial estimates were that the company could continue to produce at about one half of the pre-strike level, Asarco acknowledged on July 13 that it had declared a *force majeure* on all outbound refined copper products from its Amarillo complex, including wire rod. By the end of the week, Asarco indicated that its remaining inventory had been essentially exhausted. In the first 6 months of 2005, Asarco reported producing 88,000 metric tons (t) of refined copper.

(Barry, 2005a, b; Brooks, 2005; Grupo Mexico, S.A. de C.V., 2005, p. 6).

Quadra Mining Ltd. (Vancouver, British Columbia, Canada) reported that slope stability problems at the Tripp-Veteran pit (Robinson Mine) forced them to divert equipment to de-weight a section of pit wall and to switch some production to lower-grade and more metallurgically difficult material that it had not planned on mining until the first quarter of 2006. Though no long-term impact on the mine plan was anticipated, copper production for the year was expected to fall to 60,000 t from the previously anticipated 67,000 t. The mine produced 13,800 t in the quarter ending June 30 (Quadra Mining, Ltd., 2005).

Update

Despite additional negotiations, the strike by about 1,500 Asarco workers remained unsettled when on August 10, Grupo Mexico, S.A. de C.V. (Mexico City, Mexico), Asarco's parent company, announced that Asarco had filed for Chapter 11 bankruptcy protection from creditors. Grupo Mexico cited high production costs and "the uncertain outcome of high environmental and asbestos liabilities... and the grave effects of the prolonged general strike in all the company's units" as the reason for the filing. Analysts estimated that Asarco's environmental liabilities could exceed \$1.9 billion, and union officials contended that Grupo Mexico was using the strike as an excuse to declare bankruptcy and as a means to avoid environmental clean-up costs. The union further claimed that even the deep cuts in benefits proposed by Asarco would save only about one cent per pound of the company's estimated copper production cost. During the second quarter of 2005, the company's break-even cash costs were reported to be \$1.14 per pound of copper, an increase from \$0.95 per pound in the second quarter of 2004. Costs were higher in 2005 owing to the need for increased stripping and the highest rainfall in the past 10 years at the Ray Mine. In part, it was a concern over environmental liability that caused the U.S. Department of Justice to intervene in 2003 when Asarco sold its 54% share of Southern Peru Copper Company to Grupo Mexico for \$765 million (Barry, 2005c, d; Grupo Mexico, S.A. de C.V., 2005,

p. 9; Millman and others, 2005; Platts Metals Week, 2005).

Copper prices continued their upward trend, as the COMEX spot price averaged \$1.62 per pound and \$1.63 per pound, respectively, in June and July, and closed at a record-high \$1.74 per pound on August 12. The aforementioned production shortfalls in the United States as well as a week-long strike at the beginning of July at the 140,000-metric-ton-per-year of copper Zaldivar Mine in Chile (Placer-Dome Inc., 2005) helped to stimulate a price rise. According to preliminary data compiled by the International Copper Study Group (2005) for the first 5 months of 2005, the market fundamentals continued to support high copper prices. An apparent refined copper production deficit for the January through May 2005 period of 165,000 t, combined with a reported global stock decline of only about 30,000 t from an already low yearend 2004 level, indicated a tight supply of available copper. The production deficit for the same period in 2004 was 680,000 t. The approximately 500,000-t decline in the year-on-year apparent deficit reflected the combined effect of a 300,000-t (4.8%) increase in refined output and a 200,000-t (2.9%) decline in global copper use over the same period.

References Cited

- Barry, Sean, 2005a, Deadlock at Asarco lingers; no deal after 3 days of talks: American Metal Market, v. 113, no. 25-2, July 6, p. 4.
- Barry, Sean, 2005b, Strike drives Asarco to set *force majeure*, traders say: American Metal Market, v. 113, no. 27-2, July 12, p. 1.
- Barry, Sean, 2005c, Strike-torn Asarco files for protection: American Metal Market, v. 113, no. 31-4, August 11, p. 1, 6.
- Barry, Sean, 2005d, Union doubtful but will ponder Asarco request: American Metal Market, v. 113, no. 32-5, August 19 p. 1, 2.
- Brooks, David, 2005, Spreading Asarco strike could pare output 50%: American Metal Market, v. 113, no. 26-2, July 6, p. 1, 2.
- Grupo Mexico, S.A. de C.V., 2005, 2Q2005 CEO report: Mexico City, Mexico, Grupo Mexico, S.A. de C.V. financial report, July 21, 18 p.
- International Copper Study Group, 2005, Copper—Preliminary data for May 2005: Lisbon, Portugal, International Copper Study Group press release, August 19, 1 p.
- Millman, J., Aeppel, T., and McKay, P.A., 2005, Asarco files for Chapter 11, cites costs, strike: Wall Street Journal, The, August 11, p. A3, A8.
- Placer Dome Inc., 2005, Strike ends at Placer Dome's Zaldivar Mine: Vancouver, British Columbia, Canada, Placer Dome Inc. news release, July 11, 1 p.
- Platts Metals Week, 2005, No talks scheduled at Asarco; *force majeure* in effect: Platts Metals Week, v. 76, no. 29, July 18, p. 12.
- Quadra Mining Ltd., 2005, Quadra revises Robinson Mine production schedule for 2005: Vancouver, British Columbia, Canada, Quadra Mining Ltd. news release, July 15, 1 p.

TABLE 1
SALIENT STATISTICS OF THE COPPER INDUSTRY IN THE UNITED STATES¹

(Metric tons, unless otherwise specified)

	Source table ²	2005			
		2004 ^p	May	June	January - June
Production:					
Primary:					
Mine, recoverable	(2)	1,160,000	104,000 ^r	99,100	599,000
Refinery:					
Electrolytic:					
Domestic and foreign	(4)	671,000	56,100	49,500	323,000
Electrowon	(4)	584,000	48,800	47,700	275,000
Total	(4)	1,260,000	105,000	97,200	598,000
Secondary recoverable copper:					
Refineries	(5)	50,800	3,750	3,620	24,500
Ingot makers ³	(5)	91,800	7,650	7,650	45,900
Brass and wire-rod mills	(5)	705,000	56,600	57,800	350,000
Foundries, etc. ³	(5)	65,200	5,430	5,430	32,600
Smelter, total	(3)	542,000	36,900	44,100	247,000
Consumption:					
Apparent	(8)	2,570,000	226,000	NA	NA
Refined (reported)	(7)	2,410,000	180,000	191,000	1,120,000
Purchased copper-base scrap	(9)	1,150,000	93,300	95,500	574,000
Stocks at end of period:					
Total refined	(11)	136,000	112,000	96,300	XX
Blister, etc.	(11)	51,400	38,200	43,200	XX
Prices:					
U.S. producer cathode (cents per pound) ⁴	(12)	133.938	153.256	167.452	155.238
Imports: ⁵					
Ores and concentrates ⁶	(14)	22,900	204	NA	NA
Refined	(14)	807,000	107,000	NA	NA
Exports: ⁵					
Ores and concentrates ⁶	(15)	24,200	2,210	NA	NA
Refined	(15)	118,000	7,240	NA	NA

^pPreliminary. ^rRevised. NA Not available. XX Not applicable.

¹Data are rounded to no more than three significant digits, except prices; may not add to totals shown.

²Numbers in parentheses refer to the significant tables where these data are located.

³Monthly data and 2004 cumulative data estimated based on 2003 monthly average.

⁴Source: Platts Metals Week.

⁵Source: U.S. Census Bureau.

⁶Copper content.

TABLE 2
MINE PRODUCTION OF RECOVERABLE COPPER IN THE UNITED STATES¹

(Metric tons)

Period	Recoverable copper			Contained copper		
	Arizona	Others ²	Total	Electrowon	Concentrates ³	Total
2004: ^P						
January - June	346,000 ^r	193,000 ^r	539,000 ^r	288,000	258,000 ^r	546,000 ^r
June	59,200	33,500	92,800	49,400	44,600	94,100
July	62,000	38,100	100,000	50,700	50,900	102,000
August	62,800	36,200	99,000	49,300	51,200	100,000
September	62,800	36,400	99,200	49,800	50,800	101,000
October	64,200	39,400	104,000	48,900	56,300	105,000
November	61,400	46,500	108,000	47,600	62,100	110,000
December	63,300	45,200	109,000	50,000	60,300	110,000
Year	723,000	435,000	1,160,000	584,000	590,000	1,170,000
2005:						
January	58,500	39,800	98,300	42,400	57,600	99,900
February	54,200	37,500	91,700	40,800	52,400	93,100
March	62,100	43,200	105,000	47,400	59,600	107,000
April	62,000	39,200	101,000	47,700	55,100	103,000
May	65,300	38,400 ^r	104,000 ^r	48,800	56,700 ^r	105,000
June	62,100	37,000	99,100	47,700	52,900	101,000
January - June	364,000	235,000	599,000	275,000	334,000	609,000

^PPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes production from, Idaho, Missouri, Montana, Nevada, New Mexico, and Utah.

³Includes copper content of precipitates and other metal concentrates.

TABLE 3
COPPER PRODUCED AT SMELTERS IN
THE UNITED STATES, BY SOURCE^{1,2}

(Metric tons, copper content)

Period	Anode production
2004: ^P	
January - June	255,000
June	46,500
July	46,500
August	51,300
September	48,000
October	49,200
November	42,300
December	49,900
January - December	542,000
2005:	
January	42,700
February	36,100
March	37,900 ^r
April	49,700
May	36,900
June	44,100
January - June	247,000

^PPreliminary. ^rRevised.

¹Includes blister, anode and copper from primary or secondary sources.

²Data are rounded to no more than three significant digits; may not add to total shown.

TABLE 4
PRODUCTION OF REFINED COPPER, BY SOURCE AND METHOD OF RECOVERY¹

(Metric tons)

Period	Primary materials			Scrap	Total refined
	Electrolytically refined ²	Electrowon	Total		
2004: ^P					
January - June	327,000 ^r	288,000	615,000 ^r	25,400	641,000
June	58,900	49,400	108,000	4,460	113,000
July	49,200	50,700	99,900	4,080	104,000
August	53,400	49,300	103,000	3,870	107,000
September	57,700	49,800	108,000	4,660	112,000
October	57,400	48,900	106,000	4,540	111,000
November	56,700	47,600	104,000	4,190	109,000
December	69,300	50,000	119,000	4,010	123,000
Year	671,000	584,000	1,260,000	50,800	1,310,000
2005:					
January	54,900	42,400	97,200	4,380	102,000
February	57,400	40,800	98,100	4,380	102,000
March	52,600	47,400	100,000	4,210	104,000
April	53,100	47,700	101,000	4,160	105,000
May	56,100	48,800	105,000	3,750	109,000
June	49,500	47,700	97,200	3,620	101,000
January - June	323,000	275,000	598,000	24,500	623,000

^PPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²From domestic and foreign source materials.

TABLE 5
COPPER RECOVERABLE IN UNALLOYED AND ALLOYED FORM FROM PURCHASED COPPER-BASE SCRAP¹

(Metric tons, copper content)

Period	Refineries ²		Ingot makers ³		Brass and wire-rod mills		Foundries, etc. ³		Total ⁴
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2004: ^P									
January - June	8,010	17,400	8,360 ^r	37,600 ^r	345,000	20,100	12,400 ^r	20,200 ^r	469,000 ^r
June	1,340	3,120	1,390	6,260	55,900	2,910	2,060	3,370	76,300
July	1,340	2,740	1,390	6,260	56,400	2,440	2,060	3,370	76,000
August	1,340	2,540	1,390	6,260	56,800	2,450	2,060	3,370	76,200
September	1,340	3,320	1,390	6,260	55,200	2,690	2,060	3,370	75,600
October	1,340	3,210	1,390	6,260	56,800	2,670	2,060	3,370	77,100
November	1,340	2,850	1,390	6,260	50,500	2,670	2,060	3,370	70,500
December	1,340	2,680	1,390	6,260	48,000	3,300	2,060	3,370	68,400
Year	16,000	34,700	16,700	75,100	669,000	36,300	24,700	40,400	913,000
2005:									
January	1,340	3,050	1,390	6,260	57,700	2,780	2,060	3,370	77,900
February	1,340	3,040	1,390	6,260	54,900	3,110	2,060	3,370	75,500
March	1,340	2,870	1,390	6,260	56,300	2,980	2,060	3,370	76,500
April	1,340	2,820	1,390	6,260	54,200	3,220	2,060	3,370	74,700
May	1,340	2,410	1,390	6,260	54,100	2,550	2,060	3,370	73,400
June	1,340	2,280	1,390	6,260	55,400	2,380	2,060	3,370	74,500
January - June	8,010	16,500	8,360	37,600	333,000	17,000	12,400	20,200	453,000

^PPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Electrolytically refined and fire-refined scrap based on source of material at smelter level.

³Monthly data and 2004 cumulative data estimated based on 2003 annual data.

⁴Does not include an estimate, based on reported 2003 data of 3,040 tons per month from new scrap and 1,830 tons per month of copper recovered from scrap other than copper-base.

TABLE 6
PRODUCTION, SHIPMENTS, AND STOCKS OF BRASS AND WIRE-ROD SEMIFABRICATES¹

(Metric tons, gross weight)

Period	Production		Shipments		Stocks, end of period	
	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills	Brass mills	Wire-rod mills
2004:^P						
January - June	713,000 ^r	924,000	716,000	922,000 ^r	XX	XX
June	118,000	143,000	117,000	148,000	52,700	23,900
July	118,000	143,000	117,000	144,000	54,100	23,900
August	119,000	162,000	118,000	156,000	54,700	29,500
September	113,000	154,000	113,000	148,000	54,500	35,600
October	120,000	135,000	120,000	148,000	54,400	23,000
November	107,000	148,000	108,000	144,000	52,900	26,600
December	100,000	134,000	97,600	130,000	55,300	31,200
Year	1,390,000	1,800,000	1,390,000	1,790,000	XX	XX
2005:						
January	113,000	141,000	114,000	137,000	55,100	35,100
February	109,000	135,000	110,000	134,000	53,300	35,100
March	117,000	135,000	117,000	149,000	53,600	20,600
April	109,000	143,000	112,000	141,000	50,200	22,000
May	111,000	145,000	112,000	143,000	49,100	23,400
June	114,000	144,000	116,000	146,000	47,800	21,100
January - June	673,000	842,000	681,000	852,000	XX	XX

^PPreliminary. ^rRevised. XX Not applicable.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

TABLE 7
CONSUMPTION OF REFINED COPPER¹

(Metric tons)

Period and item	Brass mills	Wire-rod mills	Other plants ²	Total
2004:^P				
January - June	295,000	911,000 ^r	30,900 ^r	1,240,000
June	46,000	136,000	5,160	187,000
July	50,900	142,000	5,160	198,000
August	48,500	165,000	5,160	218,000
September	46,100	151,000	5,160	202,000
October	48,200	136,000	5,160	190,000
November	44,700	145,000	5,160	195,000
December	39,200	129,000	5,160	173,000
Year	573,000	1,780,000	61,900	2,410,000
2005:				
January	44,900	145,000	5,160	195,000
February	42,500	129,000	5,160	177,000
March	46,100	134,000	5,160	185,000
April	41,500	143,000	5,160	190,000
May:	43,100	132,000	5,160	180,000
June:				
Cathodes	30,600	141,000	881	172,000
Wire bars	--	--	(3)	(3)
Ingots and ingot bars	1,440	--	1,760	3,200
Cakes and slabs	(3)	--	(3)	(3)
Billets and other	12,900	W	2,510	15,400
Total	45,000	141,000	5,160	191,000
January - June	263,000	824,000	30,900	1,120,000

^PPreliminary. ^rRevised. W Withheld to avoid disclosing company proprietary data included with "Cathodes." -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Consumption by ingot makers, chemical plants, foundries, and miscellaneous manufacturers is estimated based on 2003 annual data.

³Withheld to avoid disclosing company proprietary data; included with "Billets and others."

TABLE 8
U.S. APPARENT CONSUMPTION OF COPPER¹

(Metric tons)

Period	Refined copper production	Copper in old scrap ²	Refined general imports ³	Refined exports ³	Stock change during period	Apparent consumption
2004: ^P						
January - May	507,000	88,500 ^r	262,000 ^r	85,500	(362,000) ^r	1,130,000
May	105,000	17,300	56,300	3,700	(36,600)	211,000
June	108,000	17,400	40,400	2,720	(58,900)	222,000
July	99,900	16,600	75,600	5,470	(22,800)	209,000
August	103,000	16,400	65,500	9,350	(33,200)	208,000
September	108,000	17,400	73,800	570	(23,100)	221,000
October	106,000	17,300	60,200	3,890	(12,400)	192,000
November	104,000	16,900	75,300	2,460	(7,870)	202,000
December	119,000	17,400	51,100	8,390	(749)	180,000
Year	1,260,000	208,000	704,000	118,000	(521,000)	2,570,000
2005:						
January	97,200	17,200	77,900	4,460	6,350 ^r	182,000
February	98,100	17,600	66,500	3,230	(7,110) ^r	186,000
March	100,000	17,300	72,000	2,830	(6,450) ^r	193,000
April	101,000	17,400	63,300	1,900	(4,590)	184,000
May	105,000	16,400	101,000	7,240	(11,500)	226,000
June	97,200	16,100	NA	NA	(16,100)	NA
January - May	501,000	85,900	380,000	19,700	(23,300)	971,000

^PPreliminary. ^rRevised. NA Not available.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Includes reported monthly production of copper from old scrap of copper-base, an estimate for annual reporters, and a monthly average of copper from non-copper-base materials based on 2003 data.

³Source: U.S. Census Bureau.

TABLE 9
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP¹

(Metric tons, gross weight)

Period	Smelters and refineries		Ingot makers ²		Brass and wire-rod mills ³		Foundries, etc. ²		Total scrap used
	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	New scrap	Old scrap	
2004: ^P									
January - June	8,090	17,500 ^r	11,100 ^r	54,600 ^r	433,000	20,700	21,600 ^r	22,200 ^r	589,000 ^r
June	1,350	3,150	1,850	9,110	70,900	3,040	3,600	3,700	96,700
July	1,350	2,760	1,850	9,110	71,100	2,620	3,600	3,700	96,100
August	1,350	2,550	1,850	9,110	72,600	2,580	3,600	3,700	97,400
September	1,350	3,290	1,850	9,110	70,300	2,820	3,600	3,700	96,000
October	1,350	3,230	1,850	9,110	71,500	2,810	3,600	3,700	97,200
November	1,350	2,890	1,850	9,110	63,300	2,780	3,600	3,700	88,500
December	1,350	2,700	1,850	9,110	60,300	3,440	3,600	3,700	86,000
Year	16,200	34,900	22,200	109,000	843,000	37,700	43,200	44,400	1,150,000
2005:									
January	1,350	3,080	1,850	9,110	72,400	2,910	3,600	3,700	98,000
February	1,350	3,080	1,850	9,110	69,800	3,280	3,600	3,700	95,800
March	1,350	2,900	1,850	9,110	71,800	3,170	3,600	3,700	97,500
April	1,350	2,850	1,850	9,110	68,400	3,370	3,600	3,700	94,200
May	1,350	2,440	1,850	9,110	68,500	2,710	3,600	3,700	93,300
June	1,350	2,310	1,850	9,110	71,000	2,550	3,600	3,700	95,500
January - June	8,090	16,700	11,100	54,600	422,000	18,000	21,600	22,200	574,000

^PPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Monthly data and 2004 cumulative data estimated from 2003 annual data.

³Consumption at brass and wire-rod mills assumed equal to receipts.

TABLE 10
CONSUMPTION OF PURCHASED COPPER-BASE SCRAP^{1,2}

(Metric tons, gross weight)

Scrap type and processor	2004 ^p		2005			
	January - June ^r	Year	April	May	June	January - June
No. 1 wire and heavy:						
Smelters and refiners	34,300	68,500	5,710	5,710	5,710	34,300
Brass and wire-rod mills	206,000	394,000	32,100	30,600	29,700	189,000
No. 2 mixed heavy and light:						
Smelters and refiners	13,400	26,800	2,170	1,770	1,630	12,600
Brass and wire-rod mills	3,950	6,250	411	487	407	2,770
Total unalloyed scrap:						
Smelters and refiners	47,700	95,300	7,880	7,480	7,340	46,900
Brass and wire-rod mills	210,000	401,000	32,500	31,100	30,200	192,000
Red brass: ³						
All plants	19,900	39,300	3,020	3,070	3,180	18,900
Leaded yellow brass:						
All plants	164,000	322,000	14,900	16,200	16,900	96,400
Yellow and low brass:						
All plants	20,800	41,300	14,200	13,800	15,900	89,700
Cartridge cases and brass:						
All plants	43,100	86,600	7,680	7,960	8,350	48,100
Auto radiators:						
Smelters and refiners	13,400	26,700	2,230	2,230	2,230	13,400
Bronzes:						
Smelters and refiners	4,200	8,390	699	699	699	4,190
Brass mills	3,350	6,350	601	508	479	2,780
Nickel-copper alloys:						
All plants	10,600	20,000	1,850	1,690	1,700	9,740
Low grade and residues:						
Smelters and refiners	6,300	12,600	1,050	1,050	1,050	6,300
Other alloy scrap: ⁴						
Smelters and refiners	550	1,100	92	92	92	552
Brass mills	2,720	4,860	355	359	332	2,330
Total alloyed scrap:						
Smelters and refiners	44,500	89,100	7,420	7,420	7,420	44,500
Brass mills	244,000	480,000	39,200	40,100	43,400	248,000
Total scrap:						
Smelters and refiners	92,200	184,000	15,300	14,900	14,800	91,400
Brass and wire-rod mills	454,000	880,000	71,800	71,200	73,600	440,000

^pPreliminary. ^rRevised.

¹Does not include: consumption by foundries, chemical plants, and miscellaneous manufacturers, estimated to total about 7,300 tons of scrap per month based on 2003 annual data; monthly data include estimates of about 11,000 tons of scrap per month consumed by ingot makers.

²Data are rounded to no more than three significant digits; may not add to totals shown.

³Includes composition turnings, silicon bronze, zincy bronze, railroad car boxes, cocks and faucets, gilding metal, and commercial bronze.

⁴Includes refinery brass, beryllium copper, phosphor copper, and aluminum bronze.

TABLE 11
COPPER STOCKS AT END OF PERIOD¹

(Metric tons)

Period	Crude copper ²	Refined copper					LME ⁶	Total refined
		Refineries ³	Wire-rod mills ³	Brass mills ³	Other ⁴	Comex ⁵		
2004: ^p								
June	60,600	5,680	26,600	19,600	4,870	86,300	92,800	236,000
July	62,200	6,780	29,700	19,100	4,870	71,700	80,800	213,000
August	65,700	8,640	21,400	22,600	4,870	55,900	66,400	180,000
September	71,600	7,830	15,200	24,900	4,870	44,900	59,000	157,000
October	72,200	9,210	25,200	20,300	4,870	41,300	43,400	144,000
November	70,600	13,100	24,300	18,200	4,870	38,500	37,500	136,000
December	51,400	10,300	20,300	21,500	4,870	43,700	35,000	136,000
2005:								
January	66,100	12,300	24,300	24,100 ^r	4,870	41,600	34,900	142,000
February	46,700	10,600	20,800	22,300 ^r	4,870	42,500	33,900	135,000
March	42,300 ^r	6,920	25,000	20,900	4,870	39,300	31,500	128,000
April	42,500	8,270	31,100	20,300	4,870	27,300	32,100	124,000
May	38,200	9,750	30,200	19,200	4,870	20,200	28,200	112,000
June	43,200	5,520	28,900	20,700	4,870	13,900	22,400	96,300

^pPreliminary. ^rRevised.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Copper content of blister and other materials in transit and in process of refining.

³Stocks of refined copper as reported; no estimates are made for nonrespondents.

⁴Monthly estimates based on reported and 2003 annual data, comprising stocks at ingot makers, chemical plants, foundries, and miscellaneous manufacturers.

⁵Commodity Exchange Inc., New York.

⁶London Metal Exchange Ltd., U.S. warehouses.

TABLE 12
AVERAGE PRICE OF COPPER IN THE UNITED STATES
AND ON THE LONDON METAL EXCHANGE

(Cents per pound)

Period	U.S. producers delivered price cathode ¹	Comex first position ²	LME cash price Grade A
2004:			
June	126.008	120.862	121.832
July	132.078	126.812	127.342
August	133.015	127.752	129.064
September	136.680	131.414	131.283
October	140.273	135.007	136.575
November	146.599	141.333	141.620
December	150.897	145.631	142.633
Year	133.938	128.972	129.958
2005:			
January	150.261	144.995	143.751
February	151.905	146.639	147.544
March	153.946	148.680	153.268
April	154.606	149.340	153.938
May	153.256	147.990	147.331
June	167.452	162.186	159.807
January - June	155.238	149.972	150.940

¹Listed as "U.S. producer cathode."

²Listed as "Comex high grade first position."

Sources: Platts Metals Week and American Metal Market.

TABLE 13
NEW YORK AVERAGE BUYING PRICES FOR COPPER SCRAP

(Cents per pound)

Month	Brass mills No. 1 scrap	Refiners No. 2 scrap	Dealers (New York)	
			No. 2 Scrap	Red brass turnings and borings
2004:				
June	119.82	96.55	89.00	55.00
July	125.52	101.33	89.00	55.00
August	126.64	101.73	89.00	55.00
September	127.29	106.19	89.00	55.00
October	130.43	113.38	89.00	55.00
November	135.40	118.15	89.00	55.00
December	139.14	121.00	89.00	55.00
Year	126.41	107.62	86.86	55.14
2005:				
January	139.40	119.50	89.00	55.00
February	139.89	121.67	89.00	55.00
March	142.52	123.43	89.00	55.00
April	143.52	126.00	89.00	55.00
May	138.24	124.76	89.00	55.00
June	137.23	124.82	93.09	59.09
January - June	140.13	123.36	89.68	55.68

[†]Revised.

Source: American Metal Market.

TABLE 14
U.S. IMPORTS FOR CONSUMPTION OF COPPER (UNMANUFACTURED), BY CLASS¹

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	2005			2005			2005			2005		
	January -			January -			January -			January -		
	2004	May	May	2004	May	May	2004	May	May	2004	May	May
Brazil	--	--	--	--	--	--	--	--	10	15,600	--	8,980
Canada	516	--	--	99	1	41	75,500	6,240	35,200	278,000	29,600	127,000
Chile	--	--	--	--	--	--	48,900	3,240	16,500	311,000	53,700	158,000
Germany	--	--	--	--	--	--	--	--	--	21,000	2,520	12,300
Mexico	22,400	204	204	206	--	37	8,630	1,090	2,540	19,300	3,160	24,000
Namibia	--	--	--	--	--	--	7,710	--	--	--	--	--
Peru	--	--	--	--	--	--	10,200	--	--	152,000	16,500	62,500
Taiwan	--	--	--	1,330	125	523	--	--	--	(2)	--	--
Other	--	--	--	45	10	134	35 [†]	--	--	10,500 [†]	1,260	4,700
Total	22,900	204	204	1,680	136	735	151,000	10,600	54,300	807,000	107,000	398,000

[†]Revised. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 15
U.S. EXPORTS OF COPPER (UNMANUFACTURED), BY CLASS¹

(Metric tons, copper content)

Country or territory	Ore and concentrate			Matte, ash and precipitates			Blister and anodes			Refined		
	2005			2005			2005			2005		
	January -			January -			January -			January -		
	2004	May	May	2004	May	May	2004	May	May	2004	May	May
Belgium	6	--	39	45	--	37	1,320	16	675	998	--	49
Canada	18,200	905	7,160	18,800	1,990	8,980	22,400	1,750	9,570	2,230	113	1,200
China	2,340	81	20,400	52	455	2,780	307	60	181	23,900	5,780	9,690
Costa Rica	--	--	3	--	--	--	--	--	--	1,300	--	1
Germany	32	--	--	23	--	15	1,880	120	449	70	19	133
Hong Kong	229	--	2	12	--	1	3,410	356	1,330	11	--	--
India	56	--	149	21	--	1	164	--	27	2,940	1,260	3,410
Italy	--	--	--	--	--	18	1,570	162	1,670	21,100	--	14
Japan	2,510	--	4,620	122	2	68	705	250	998	66	--	5
Korea, Republic of	23	--	1	8	--	--	8,910	67	203	5,060	--	75
Mexico	115	1,160	6,380	2,650	33	412	221	42	180	20,500	17	4,820
Netherlands	--	--	--	37	--	--	--	--	--	1,280	--	-2
Saudi Arabia	--	--	--	--	--	--	--	--	11	7,840	--	--
Singapore	--	--	19	19	6	10	654	20	249	39	--	13
Sweden	--	--	--	--	--	--	399	120	1,040	3	--	--
Taiwan	109	--	--	5	--	--	1,320	239	778	29,000	51	55
United Arab Emirates	5	--	--	5	--	--	669	--	64	--	2	2
United Kingdom	37	--	21	87	--	33	474	5	104	590	--	45
Other	577	65	1,640	207 ^r	21	51	2,030 ^r	55	295	1,330 ^r	1	10,200
Total	24,200	2,210	40,400	22,100	2,500	12,400	46,400	3,260	17,800	118,000	7,240	29,700

^rRevised. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

²Less than 1/2 unit.

Source: U.S. Census Bureau.

TABLE 16
U.S. COPPER SCRAP IMPORTS¹

(Metric tons, gross weight)

Country or territory	Unalloyed			Alloyed		
	2005			2005		
	2004	January-		2004	January-	
		May	May		May	May
Canada	6,370	469	2,800	44,500	3,410	19,200
China	1	--	--	448	11	30
Costa Rica	1,400	180	737	516	41	136
Dominican Republic	446	5	69	432	30	223
Germany	48	--	6	1,130	--	--
Guatemala	271	--	37	1,050	124	571
Honduras	1,430	95	795	625	58	232
Jamaica	429	21	117	182	8	47
Japan	65	2	18	145	--	82
Mexico	10,300	824	4,100	22,100	1,940	9,840
Taiwan	--	--	--	1,480	5	75
United Kingdom	554	31	120	1,030	123	263
Other	2,130 ^r	102	800	4,630 ^r	444	3,350
Total	23,400	1,730	9,600	78,300	6,190	34,000

^rRevised. -- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.

TABLE 17
U.S. COPPER SCRAP EXPORTS¹

(Metric tons, gross weight)

Country or territory	Unalloyed							Alloyed				
	2005							2005				
	2004	No. 1		No. 2		Other		2004	Segregated		Unsegregated	
		January-		January-		January-			January-		January-	
		May	May	May	May	May	May		May	May	May	May
Bangladesh	--	--	--	--	--	--	--	--	--	2,790	--	--
Belgium	3,850	--	--	--	1	47	263	8,200	270	661	79	2,220
Canada	33,300	--	--	--	--	1,630	11,900	15,000	235	1,500	301	3,520
China	222,000	9,260	35,800	11,400	50,000	7,330	24,100	239,000	10,200	44,500	412	41,200
Germany	8,830	--	404	--	320	1,200	4,230	13,800	82	1,080	764	3,680
Hong Kong	3,910	712	2,030	323	931	157	312	11,000	381	1,970	758	3,960
India	4,160	101	265	39	221	417	1,730	45,100	1,610	7,910	236	705
Japan	7,930	--	21	87	616	624	2,680	9,660	443	2,590	237	1,010
Korea, Republic of	22,400	695	2,740	1,590	4,890	1,030	4,760	16,300	911	5,250	243	1,500
Mexico	4,560	44	251	--	200	--	176	1,570	59	154	19	143
Spain	37	--	2	2	118	--	2	2,740	31	129	90	901
Taiwan	11,300	339	409	734	3,020	442	1,400	13,700	647	3,250	--	573
Thailand	--	--	--	--	--	120	278	1,250	58	347	--	--
United Kingdom	34	--	--	--	--	--	88	4,560	15	79	355	1,640
Other	2,990	15	31	64	167	--	356	7,210	211	845	11,000	553
Total	325,000	11,200	41,900	14,300	60,500	13,000	52,300	389,000	15,100	73,100	14,500	61,600

-- Zero.

¹Data are rounded to no more than three significant digits; may not add to totals shown.

Source: U.S. Census Bureau.